

### 2.1.3 DAYCARE FACILITIES

The DPW is obligated to provide facilities for this purpose based on certain levels of occupancy within a building or complex. This has been established by the Legislation in the State Statutes Section 17b-739 **Child care facilities in state buildings**. The statutes read: "Whenever the state (1) constructs, acquires or receives as a gift any office building which accommodates three hundred or more state employees or (2) alters, repairs or makes additions to an existing state building which accommodates three hundred or more employees and such alterations, repairs or additions affect at least twenty-five percent of the square footage of such building, the DPW shall notify the Department of Social Services (DSS). The DSS, with assistance of the Department of Administrative Services, shall determine the need for child care services for the employees in such building and other potential participants. If a demonstrated need for child care exists for thirty or more children of such employees and other potential participants and such care is unavailable, the DPW shall set aside adequate space for child care facilities in such building."

### 2.1.4 FOOD SERVICE FACILITIES

An Architect/Engineer or other consultants involved in the design of food service must be familiar with the health standards for food establishments required by the Department of Public Health (DPH). To assist the consultants in the design of food service facilities there are two publications available from the DPH, they are as follows:

- Technical Standards for Food Establishments Facility Plan Review
- Food Establishment Plan and Specification Review checklist.

The DPH does not require design document submissions for review and will rely on the **local health inspector** for compliance with the health requirements. Approval or sign-off must be obtained prior to going to bid.

If a private vendor is to manage the food service, the A/E must review the design of the food service facilities with the local health department. See also the "Permits and Approvals" section of this manual.

The food service equipment and installation of the equipment shall conform to the standards of the National Sanitation Foundation (NSF) and NSF Manual on the Sanitation Aspects of the installation of Food Service Equipment.

DEP Issues New General Permit for the Control of Fats, Oils, and Greases (FOG) in Food Preparation Facilities. Refer to:

[http://www.ct.gov/dep/cwp/view.asp?a=2721&q=325696&depNav\\_GID=1643](http://www.ct.gov/dep/cwp/view.asp?a=2721&q=325696&depNav_GID=1643)

The general permit requires food preparation facilities to install either of two methods designed to significantly control FOG at its source. The first method is the installation of a passive 1,000-gallon minimum grease interceptor outside the facility. The second method is an automatic grease interceptor unit installed inside the facility. Either method results in the capture of the FOG before it enters the sewer system. The captured FOG is then taken to regional disposal sites where it can be further treated and potentially consumed as a fuel source in regional sewage sludge incinerators.

Food preparation facilities have until July 1, 2011 to comply with the conditions of the permit. However, newly constructed facilities, facilities that renovate, and facilities that are sold must enter into compliance as part of that process. Additionally, a municipality can require a facility or facilities to implement these changes if a sewer system area is deemed to be a FOG problem

area. The permit gives municipalities the authority to exempt food preparation establishments that have small discharges with minimal FOG quantities due to the nature of the food prepared.

Contact at the State of Connecticut, DPH Services:

Environmental Health – Food Protect  
Bureau of Regulatory Services  
Department of Health Public Health  
State of Connecticut  
Tel. (860) 509-7297

### 2.1.5 EQUIPMENT GUIDELINES

The DPW provides moveable equipment to most of the projects it undertakes. These services are either provided by in-house personnel or are contracted for by external consultants. In either case, the equipment is ordered through the procurement process, which falls under the Department of Administrative Services. It is most important to understand how this is done to have timely arrival of these goods to coincide with the delivery of the building. The procurement process takes up to six months to order and deliver plus another three to four months to identify and put together a listing of the equipment and funding needed to obtain the supplies. Lastly, space must be available to store the material if the spaces are not ready for immediate installation.

In most cases this work will be a separate contract, there is little need to burden the construction contract with this work since it is not dependent on structural support or mechanical/electrical connection that cannot be made by a simple power cord. In other cases it might be prudent to consider these items within the basic construction contract due to the need for coordination with the general support systems. This determination will be made by the design professional.

#### **General Contract Equipment**

Specific information related to the equipment or installation of the equipment shall be included in the plans and specifications under the following conditions:

Where installation and final connections to roughing-in are closely involved with structural features and are so extensive in character that coordination under the supervision of the general contractor is considered desirable.

Where moveable equipment in a given area is closely involved in matching design, finish and space requirements with other similar General Contract equipment in the same area.

#### **General Contract Services**

Plans and Specifications shall include:

1. Roughing, anchoring, installation and final connections where fixed equipment is either specified in the contract documents or included on the moveable equipment list for procurement outside of the General Contract.
2. Disconnecting, dismantling, moving, relocating, re-assembling, and re-installation with final connections, where existing equipment must be transferred from present locations to the new building.

3. DPW will be responsible for the review of these items to ensure that they are identified and specified correctly within the contract documents by the A/E or other consultants. The comments will also include details of related installation requirements and utility connections needed for a complete installation of the work.
4. If moveable equipment is being provided by a consultant, it is expected that a plan will be provided to demonstrate the equipment location, and any coordination needed either by utility connection or location to installed equipment within the base contract.
5. If loose equipment is being contracted to a consultant, they will utilize the existing DAS program where equipment has been bid under the general purchasing contract. If additional equipment is needed or not already on the bid list, the bid documents will be prepared in conjunction with the DAS format and be bid by that state Agency. All work will be approved by the Connecticut Standardization Committee.

### Minimum Standard

Equipment and material specifications, when based on a particular proprietary brand and model, shall list only those points necessary to set the minimum standard as to function, quality, and workmanship that will be required of any proposed alternative to the specified brand. Include the names of three acceptable manufacturers, and their equivalent model, style or quality name or number. This requirement applies wherever a manufacturer and his product are given in any section of specifications. Do not include "or equal" clause.

## 2.1.6 BUILDING SECURITY

### 2.1.6.1 General

The Building Team needs to be aware of the need for site and building security in all of our projects. Some planning concepts are stated here because of their importance to building planning, but architects should familiarize themselves with the in-depth standards being developed by DPW for security conscious design if your project is triggered by the listing below.

To determine which level of security is appropriate for your building, we have developed a set of minimum-security standards for their holdings. There are vast differences in the types of facilities and their security needs. To complete this analysis, DPW has divided the buildings into three security levels. If your building contains any of the following you need to contact your PM to explore the work and design that will be necessary to include as part of the basic design.

We are utilizing a list of guidelines that have been used by the California/OSHA Guidelines for Workplace Security:

1. Exchange of money
2. Working alone, at night or during early morning
3. Availability of valued items, such as money or jewelry
4. Guarding money or valuable property or possessions
5. Performing public safety functions in the community Mission of the agency involves working with patients, arrested persons, clients, passengers, customers or students known or suspected to have a history of violence
6. Employees with a history of assaults or who have exhibited belligerent, intimidating or threatening behavior to others.

Other factors that could be considered criteria that would trigger concern or at least the need to review the building would be:

1. Geographic location
2. Historical data relative to crime at the facility or in the surrounding area
3. Total square footage of the facility
4. Number of employees assigned to this location
5. Hours of operation
6. Extent of contact with the public
7. Lack of controlled access (sign-in process)
8. Lack of security personnel
9. Lack of electronic card access and/or alarm systems
10. Lack of video surveillance cameras on the perimeter of the facility

If your building or design involves any of the above, we have to pay careful attention to these structures.

### 2.1.6.2 General Guidelines

**General Layout** Many future security problems can be prevented by planning a clear, simple circulation system that is easy for staff and visitors to understand. Avoid mazes of hallways and hidden corners. Exterior doors should be readily visible.

**Planning for Future Security Provisions** All buildings should be planned to allow for future controlled access both to the entire building and to individual floors

**Site Design** Building entrances should be designed to make it impossible for cars to drive up and into the lobby. Concrete planters make excellent barriers; bollards are also acceptable if well integrated with the design of the building entrance. In general underground parking for public or delivery is to be avoided. Driveways and other vehicle access next to the building if possible should also be avoided.

**Landscaping** landscaping should be planned in such a way as to avoid creating potential areas of concealment for criminals. The placement of trees in close proximity to buildings and walls or fences where they can be used to get to an upper floor or breach perimeter security should also be avoided.

**Parking Lots and Garages** security for parking lot and garages as well as loading dock areas must also be thoroughly planned out. Appropriate fencing, lighting, landscaping, access control, panic alarm stations, video surveillance cameras, location of visitor spaces, whether or not there is to be direct access to a facility from a garage and the design and location of stairwell and elevator cores are some of the items that must be taken into consideration with any project involving these types of areas. Whether or not electronic security systems are to be installed at the time of the project, provisions should be made for future deployment.

**Building Entrances** State buildings should have one main entrance for staff, visitors and the public. In large buildings a second entrance may be designated for employees only. Buildings may have additional doors used for egress or access to service areas. These doors should not be used as entrances. If this cannot be avoided, the issues must be discussed at length with DPW Security Unit and the user Agency(s).

**Building Lobby** The building lobby should always be designed to permit subdivision into a secure and a non-secure area. The two areas could potentially be divided by turnstiles, metal detectors or other devices used to control access to secure areas. There should be space on the secure side for a control desk and an area where bags can be checked. Mechanical ductwork, piping and main electrical conduit runs should not extend from one area to the other.

**Shops** (stores) should be located on the non-secure side of the lobby. Exceptions could exist where commercial establishments service the building population only.

**Elevators** serving the upper levels should be visible from the lobby and arranged so at least one car can be designated for secure traffic in the future. This elevator should be accessible from the future secure side of the lobby only. Generally, elevators should not travel between the parking levels and the upper floors of a building. A separate bank of shuttle elevators should connect the parking garage with the "non-secure" side of the lobby only. Employees and visitors then pass to the secure side and take elevators to the upper floor of the building.

There may be exceptions to the above, these must be discussed with your PM as well as with the DPW Security Unit to resolve any non-conforming design.

**Mechanical and Electrical Spaces** Access to mechanical and electrical spaces should be from the inside of the building, located on the secure side of the (potential) security point in the building lobby.

Exterior lighting is one of the most over-looked yet effective means of preventing criminal acts in or around property. Therefore it needs to be designed with safety and security as the first priority. Whether or not video surveillance cameras are installed around the outside perimeter, the lighting designer should assume this would occur at some point and plan appropriately.